

A Work Project, presented as part of the requirements for the Award of a Masters Degree in Management from the Faculdade de Economia da Universidade Nova de Lisboa.

AN ANALYSIS OF THE BRAZILIAN REITs

ANTONIO REIS SILVE NETO 2919

A Project carried out on the Master in Management course, with the supervision of:

Professor Melissa Prado

&

Professor Adriana Bruscato

MAY 2016

Abstract

To contribute to the literature about the Brazilian Indirect Real Estate market, this paper studies the impact of diversification strategy and full control / ownership of properties on the performance of Fundos de Investimento Imobiliário (FIIs), the Brazilian version of REITs. I collected information about 110 FIIs and the quantitative analysis suggests that both diversification strategy and full control of properties negatively impact performance of FIIs. Considering past researches, the results are unexpected and indicate that Brazilian REITs are different.

Keywords: Fundos de Investimento Imobiliário (FIIs), Diversification, Full Control, Brazilian Real Estate Market, Performance.

Summary

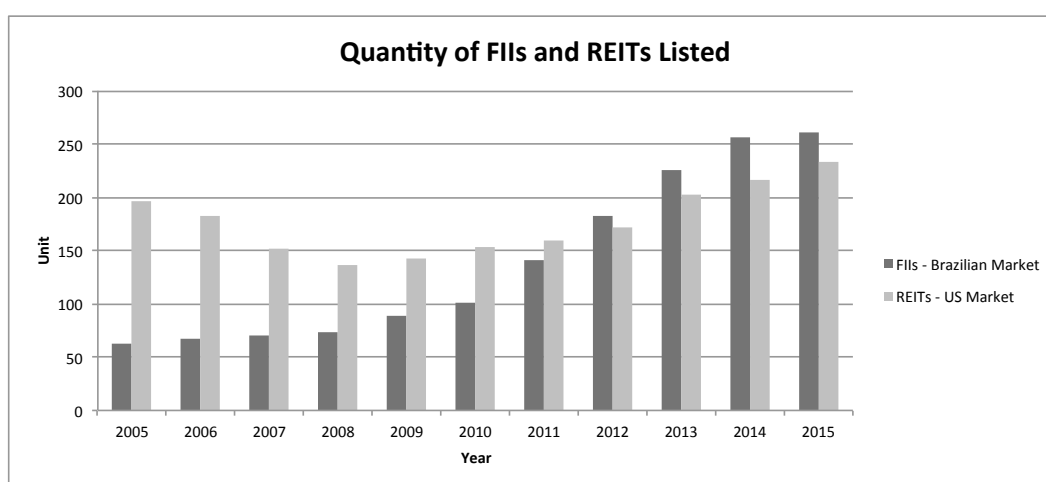
Abstract	2
Introduction	4
Fundos the Investimento Imobiliário, the Brazilian REITs	8
Literature Review.....	9
REITs Specialization Vs. Diversification Strategy	10
REITs Control and Ownership	12
Hypothesis	13
Data.....	14
Methodology	16
Results	19
Jensen's Alphas Benchmarked with IBOV, IMOB and IFIX	20
Regression Results	24
Conclusion.....	26
References	28
Appendices	32

Introduction

The structure for Real Estate Interest Trust (REIT) in Brazil was first implemented in 1993. It can be considered relatively new when compared to the U.S.'s structure and although the REIT Market in Brazil is considered very small when benchmarked to North America, Europe and Asia, it has gone through great evolution in the last 10 years. Refer to Table 1 at the end of the Introduction for detailed numbers about Market Capitalization from US, Europe and Asia. Table 1 also shows, as a comparative alternative, the Equity Value of Brazilian FIIs, which was approximately EUR15.6 billions.

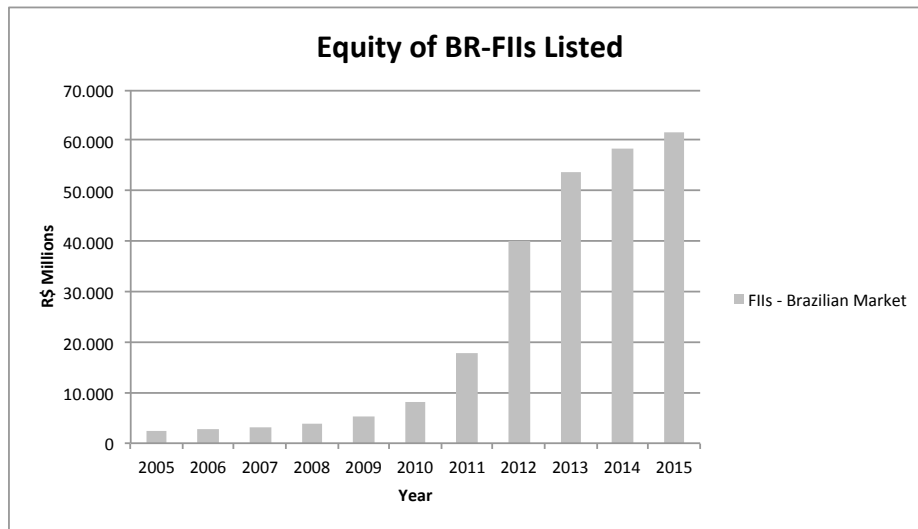
In February 2015 the Stock Exchange of São Paulo, BM&FBOVESPA, had around 130 Fundos de Investimento Imobiliário(FIIs), the Brazilian version of US-REITs, whereas more than half, approximately 67%, had the initial public offering (IPO) between 2010 and 2015. After the subprime crisis of 2008, the quantity of FIIs increased significantly in Brazil and between 2009 and 2015 the Equity Market value expanded approximately 1,100% (CVM, 2016). Refer to Charts 1, 2 and 3, below, for more details about the evolution of Brazilian FIIs market compared to US-REITs market.

Chart 1. Number of Brazilian FIIs Vs. US REITs – 2005 to 2015



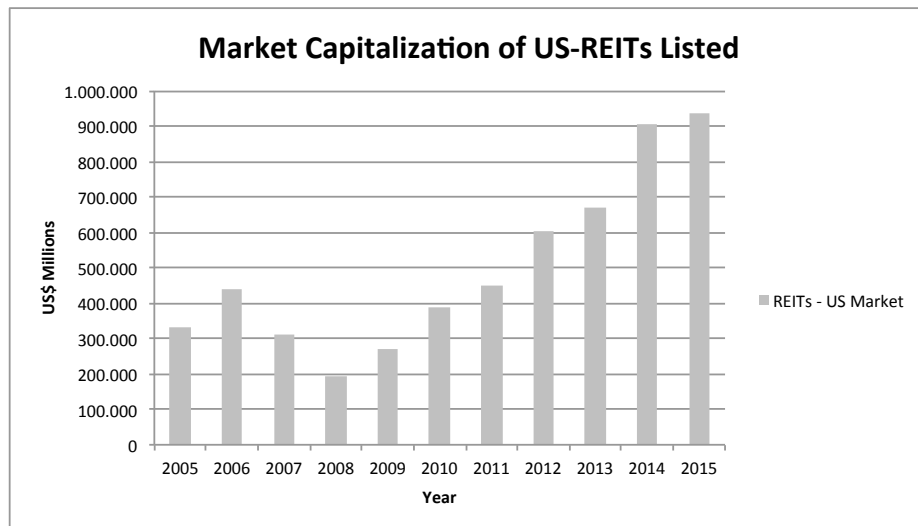
Source: CVM and NAREIT, 2016.

Chart 2. Size evolution of Brazilian FIIs (BRL million) – 2005 to 2015



Source: CVM, 2016.

Chart 3. Size evolution of US REITs (US\$ millions)– 2005 to 2015



Source: NAREIT, 2016.

Although Brazil currently is going through both a political and economic crisis, the FIIs are an important investment alternative. Fonseca (2012) explains that its economic importance comes from the organization of the sector, that is similar to a true market where exists developers, brokers, managers, wealth and job creation. The study of FIIs needs to continue

evolving because the importance of proper management for their assets grows along with its relevance in the Brazilian financial market (Guimarães, 2013). Therefore, the present research seeks to expand FII's analysis by contextualizing the importance of two management strategies, diversification and full control of properties, for the FII's performance.

The first strategy examined, whether diversify or specialize the portfolio of buildings according to property type, was analyzed before in the international context and there are many articles covering diversification strategies of REITs (Anderson et al. 2015; Chong et al. 2012; Ro and Ziobrowski 2011; Boer et al. 2005; Byrne and Lee 2003; Capozza and Lee 1995). Those articles come to different conclusions and debate the pros and cons about focused and diversified REITs, but the overall recent results show that returns increase with diversification.

The second management strategy studied is the level of control (ownership) over the properties that compose the FII's portfolio. Although the literature discusses the importance of the corporate structure behind REITs management, such as corporate governance, dividend politics, agency cost and institutional ownership (Brockman et al. 2014; Ghosh and Sun 2014; Devos et al. 2013; Campbell et al. 2011; Erol and Tirtiroglu 2011; Dolde and Knopf 2010), not much research exists on what concerns having as much control as possible over the buildings.

To verify how important diversification strategy and level of control are for FIIs management, this study proposes a regression model where an indicator of performance, the Jensen's Alpha, is explained by diversification and control strategies. I collected a data sample regarding 110 FIIs public listed at São Paulo's stock exchange, BM&FBOVESPA, and used it to run analysis and obtain the results.

As it is shown at charts 1, 2 and 3 at page 4 and 5, the number of FIIs in Brazil quadrupled in the last 10 years and with it the volume of the market also grew. This movement makes the

study of FII's behavior important to lead to more accurate investments.

During the next pages the discussion is divided in a contextualization of Fundos de Investimento Imobiliário (FIIs), a literature review on REITs and diversification and control strategies, description of the data under analysis, methodology, results and finally the conclusion.

Table 1. REITs market size by country in 2015

Europe	Sector Summary Market Cap (EUR€m)	North America	Sector Summary Market Cap (EUR€m)
Belgium	8,054	Canada	58,825
Bulgaria	400	United States	827,676
France	113,125	Total	886,501
Germany	38,01		
Greece	1,873	Asia	Sector Summary Market Cap (EUR€m)
Ireland	1,448		
Italy	5,52	Australia	100,455
Netherlands	28,145	Hong kong	26,064
Spain	46,336	Japan	277,835
Turkey	6,697	Malaysia	32,308
UK	201,959	New Zealand	3,71
Total	451,567	Singapore	104,708
		South Korea	1,364
Africa	Sector Summary Market Cap (EUR€m)	Taiwan	2,615
South Africa	51,404	Thailand	8,079
		Total	557,138

Source: EPRA - Global Real Estate Survey 2015

South America	Sector Summary Net Equity (EUR€m)	South America	Sector Summary Net Equity (BRLm)
Brazil	15,582	Brazil	61,703

Source: CVM - Comissão de Valores Mobiliários 2015.

Fundos the Investimento Imobiliário, the Brazilian REITs

Within the Capital Markets exist many types of investment vehicles/products. As Hudson-Wilson et al/ (2005) explains, in the Real Estate case there are basically four financial structures of investment: i) private commercial Real Estate equity; ii) private commercial Real Estate debt; iii) public real estate equity – REITs or Real Estate operating companies (REOCs); and iv) public commercial Real Estate debt. In the USA a famous alternative is Real Estate Investment Trusts (REITs), which give investors an indirect form to invest in Real Estate. In Brazil, Fundos de Investimento Imobiliário (FIIs) are the equivalent to US-REITs, and however with some specific differences, FIIs have laws / legislation qualifying and regulating its operability similarly to USA that has the legislation in accordance to the Real Estate Investment Trust Act of 1960 while in Brazil it is according to Lei 8668/93 from Instrução 205/94 from Comissão de Valores Mobiliários (CVM).

Two important characteristics to emphasize and that are common to both cases, FIIs and REITs, is that it is not mandatory to be publicly traded on the stock exchange and that there are no legal restrictions regarding the use of leverage. Differences between both of them are that US-REITs can't have less than 100 stockholders and 5 or fewer stockholders can't exceed 50% of shares, while for Brazilian FIIs there is the need for a minimum of 50 stockholders and they can't have more than 10% of shares. In terms of mandatory distribution, US-REITs have to deliver 90% of operational profit, have no specific rules for net capital gain distribution and the timing is annually, whereas Brazilian FIIs need to return 95% of operational profit, 95% of net capital gain and have a biannual timing. Refer to Appendix A where Table 02 provides the main characteristics of FIIs and REITs.

Gabriel (2014) highlights that the variances between the Brazilian and the American market in terms of financial system, capital markets, structure, market size, maturity as well as regulations and macroeconomics aspects, do have consequences in the contrast between FIIs

and REITs performance analysis. The numbers regarding the size of both markets, alone, can suggest discrepancies. Take the American REITs for instance, according to NAREIT (2016) they registered in 2015 an Market Capitalization of US\$ 938.8 billions with 233 REITs publicly listed and negotiated, while, for the same year, the Brazilian FIIs composed a total Net Equity Market value of R\$ 61.7 billions with 261 FIIs listed at CVM, however the number of them actually publicly traded was lower. In the beginning of 2016, 129 FIIs were publicly traded at BM&FBOVESPA.

Cosentino and Alencar (2011) analyzed the differences between FIIs and US-REITs concluding that FIIs still need to mature as an investment alternative and, although under growth, its liquidity is not the same as the American. However, as the Brazilian Real Estate market evolves, FIIs are supposed to have more presence as a mechanism for investors interested at the Real Estate sector.

Literature Review

The following topic will cover a literature review of previous studies about the Real Estate Market and REITs. The review seeks to understand what kind of peculiarities this specific market has and how the topics Diversification and level of Control were approached in the past.

Karvel and Unger (1991) said that there are several reasons to invest in Real Estate. According to them, direct Real Estate investments provides advantages such as: i) the protection of asset purchasing power through appreciation in value; ii) the ability to increase profits through leverage, or the use of borrowed money; iii) the tax sheltering of income through depreciation of buildings; iv) optimum cash flow after taxes; v) opportunities for management control; and vi) the price of ownership.

However, those advantages apply for direct Real Estate investment. When an investor chose

the indirect alternative, Real Estate Investment Trusts (REITs) for example, he might face something slightly different.

According to Brounen and Koning (2012) REITs give investors a liquid way of investing in diversified portfolios of commercial Real Estate and allow an attractive legal structure for Real Estate Companies even though the listed entities experience operations and policies restrictions. Pagliari (2005) compared indirect and direct Real Estate investments and found that, historically, REITs exceeded the returns on private Real Estate equities and are favored by individual / small investors, while large institutional players still prefer private Real Estate investment.

Real Estate Investments are highly conditioned to region and law restrictions. Each country has its own peculiarities. Brounen and Koning (2012) through their REIT history review showed the importance to set the correct conditions to develop a sizeable REIT industry. According to them, not only in US but also beyond, lobbying organizations and coinciding financial deregulations are key to REIT markets growth.

REITs Specialization Vs. Diversification Strategy

A diversified firm is active in multiple businesses or markets. Consequently, a firm level of diversification is one of the main concepts characterizing its corporate level strategy. (Furrer, 2011)

In any business, the chosen strategy is what managers might believe to be the reasoning that will help to achieve an expected result or objective. If assumed that the objective of a firm is best performance and value, there is a debate issue to what concerns the efficiency of specialization or diversification strategy.

According to Berger and Ofek (1995) theoretical arguments suggest that diversification has both value-enhancing and value-reducing effects. However, in their research, they analyzed the effects of diversification on firm value and results actually showed a negative relationship.

Lang and Stulz (1994), on the other hand, studied whether the market evaluation of a firm correlates with its diversification degree, however they didn't find evidence that diversification benefits, or not, firms on average. According to them, if diversified firms differ from specialized firms only because diversification improves performance, it could be expected that diversified firms have more value than comparable portfolios of specialized companies.

The Real Estate Market has its own peculiarities and by analyzing it, one should expect a REIT to be like a firm in the sense that it would sell returns according to tenant's rental payments to use a certain property. To achieve better returns, REITs can increase their portfolio size by acquiring more buildings and adopt strategies to diversify the types of properties, or focus on only one type.

However, to what concerns the efficiency of each strategy, studies from the past years show that this particular industry can present different results.

Ro and Ziobrowski (2009) examined how property focus or diversification influences the value in U.S equity REITs from 1997 to 2006. According to them, REITs present strong tendency to seek one particular property type. Through their analysis, by adopting CAPM and Fama-French three factors model with momentum, they concluded that there is no evidence of superior performance associated with specialized REITs. It is actually verified that, although without statistically significant margin, diversified REITs somewhat outperform specialized ones. Ro and Ziobrowski (2009) also concluded that specialized REITs present higher market risk than diversified REITs. A few years later Chong et al. (2012), on the other hand, say that the arguments in favor of a focused strategy are that the REIT managers should have a better understanding and knowledge of specialist markets and sectors, and they would also count with less cost in monitoring and analyzing more markets. Hence, even though the idea of focus can appear inconsistent to the portfolio theory and diversification, economically it

might make sense.

The latest article where Anderson et al. (2015) analyzed the property-type diversification of REITs and its operating performance shows a positive impact of diversification on returns due to shielding against property-type specific risk. Nevertheless, Anderson et al. (2015) also concludes that, despite of superior performance, buying diversified REITs instead of specialized REITs is not a profitable strategy.

Although more related to performance analysis, the results obtained by Anderson et al. (2015) are drivers for the study of diversification strategy impact over FII's performance, and similar tendencies are expected for the Brazilian context.

REITs Control and Ownership

When the issue of discussion is the level of control that a REIT has over its properties, not much can be found within articles and academics analysis. Howton (2012) says that prior research on the impact of REITs ownership on property performance is limited and inconclusive. This is a reason why the study of this topic might be relevant. For some Brazilian FIIs it is common to have only a percentage, or floors, of a building integrating its portfolio. This condition raises the questions: Does 100% control of a building matter to REIT's performance? Do REITs that have less than 100% of a Real Estate asset present worst results?

The literature about ownership and control is well explored in the context of the firm, which Boukouras (2011), Lozano et al. (2015) and Basu et al. (2016) have recently discussed.

As Boukouras (2011) comments, in a firm owned by shareholders that have professional managers controlling operations, the associated agency cost and corporate mechanism to decrease it are popular topics involving ownership and control discussion. At Lozano et al. (2015) research it is explored the problem between minority and majority shareholders and results lead to a U-shaped relation between ownership concentration and firm value. Basu et

al. (2016) explores blockholder-level measures of power and its consequences to firm value, and also how multiple blockholders can lead to significant difference between ownership and power.

According to Howton (2012), the long horizon of REITs might lead them to more intensively focus of operations as a source of value creation. The idea of REITs becoming more efficient in term of performance because of their management operations enhances the importance to understand if the degree of control that REITs have over their properties is relevant.

Although limited to a specific niche of the Real Estate Industry, Hotel business in the USA, Howton et al. (2012) studied the performance between REIT-owned properties and non-REIT-owned properties concluding that REIT ownership favorably impacts the performance of properties.

Hypothesis

The objective of this research is to have a better comprehension of the impact that diversification strategy has over the performance of the Brazilian FIIs and also if the trusts from Brazil that have 100% control of the building (s), which are part of its portfolio, do perform better. To comprehend those questions two hypotheses are raised and will be empirically tested. According to the latest international literature, diversification has a positive impact over REITs by achieving better performance (Anderson et al., 2015). A similar result should be expected for the Brazilian FIIs case, thus **the first hypothesis is that FIIs that apply a diversification strategy outperform FIIs that are specialized.**

The last hypothesis considers the importance of having 100% control of the building (s) composing the FII's portfolio. Since research about this topic is poor, to approach the subject in order to formulate a coherent hypothesis, an alternative is to verify which problem 100% control of a building can make managers avoid. Since 100% control of properties basically means not having a partner sharing some decisions and interfering in the property, it is

possible to assume that 100% control leads the FII managers to prevent agency problems and conflicts with potential partners. Therefore **the second hypothesis is that FIIs with 100% ownership of its buildings outperform FIIs that do not fully own their properties.**

For both hypotheses, the measurement of performance is according to the Jensen's Alpha value, a financial indicator and which is better discussed at the Methodology at page 17.

Data

The current research has two main problems being targeted, as described at the Introduction and Hypothesis sections of this paper. To analyze those issues first it was validated how many FIIs had their stocks being commercialized at the Brazilian Stock Exchange BM&FBOVESPA by February of 2016, which totalized 129. Then, through the use of the Bloomberg platform, a data collection gathered the Closing Price of the Share, the Total Number of Outstanding Shares, the Fund Net Asset Value and the Total Gross Return of FIIs from January 2002 to February 2016. From those preliminary data it was possible to obtain the Age of each FII, which for the present research is considered the time the FII presented Gross Returns computed at the Stock Exchange, and also the Market Capitalization value of each FII, which is the multiplication between the Last Price of the Share by the Number of Outstanding Shares. All information together composes a data set and Table 3 bellow shows its descriptive statistics.

Table 3. Descriptive Statistics – Period between July 2004 and February 2016

Variable	Mean	Std. Dev.	Minimum	Maximum	Observations	
reit	55,06	31,90	1	110	N=	5858
price	484,45	829,23	0,11	11810,00		
shares	6,71	20,34	0	323,01		
grossret	869,95	1580,44	0,52	13828,78		
nav	498,11	857,66	0,33	11631,75		
mcap	222,34	661,66	0	29241,45		
age	45,24	34,69	2	170,00		
Ddiv	0,35	0,48	0	1,00		
Dcontrol	0,39	0,49	0	1,00		

Notes: The data set is a panel data where the Panel ID variable (groups) is the FIIs-BR and the time variable is the monthly date. The variable “reit” represents the FIIs-BR; “price” is the Closing Price of the Share; “share” is the Total Number of Outstanding Shares (in millions); “grossret” is the total gross return index; “nav” is the Fund Net Asset Value; “mcap” is the Market Capitalization (in millions); and “age” is the Age of the FII (in months); “Ddiv” is the dummy for diversification and which has value 1 if the FII is diversified and 0 if it is not; “Dcontrol” is the dummy for control and which has value 1 if the FII has full control of properties and 0 if it doesn’t; Each FII (reit), that together totalizes 110, has a number of monthly observations (date) that can vary from 1 to 140. For each FII the variables “price”, “shares”, “grossret”, “nav”, “mcap” and “age” have a monthly observation.

The total number of FIIs that had data available for all the six variables mentioned is 110. Together they constitute a Data Panel sample and to complete the summarized information from Table 3, Table 4 shows the Correlation Matrix between the variables. It is important to mention that the correlation value between the control variables Age, Fund Net Asset Value and Market Capitalization, as it is justified at the Methodology, is low and the correlation between them doesn’t exceed 0.30.

Table 4. Correlation Matrix: Observations from All Data & Only from February 2016

<i>Correlation (All Data)</i>	<i>Price</i>	<i>Shares</i>	<i>Grossret</i>	<i>NAV</i>	<i>Mcap</i>	<i>Age</i>
Price	1					
Shares	-0.17952301	1				
Grossret	0.877669617	-0.169764354	1			
NAV	0.932087738	-0.178161164	0.782008681	1		
Mcap	0.142593197	0.221708977	0.100477139	0.136473091	1	
Age	0.135303157	0.215572754	0.286263325	0.147203361	0.073329188	1

<i>Correlation (Feb 2016)</i>	<i>Price</i>	<i>Shares</i>	<i>Grossret</i>	<i>NAV</i>	<i>Mcap</i>	<i>Age</i>
Price	1					
Shares	-0.107705793	1				
Grossret	0.884642115	-0.123459573	1			
NAV	0.964191809	-0.12796337	0.892818173	1		
Mcap	0.293035692	0.073784903	0.261824332	0.292916741	1	
Age	-0.009182162	0.156393326	0.199434557	0.05571238	0.0924985	1

These 110 FIIs had their prospects and reports collected from the BM&FBOVESPA's webpage so that a review and analysis could be done in order to classify them according to diversification and level of control over the buildings.

As benchmarks for the CAPM model described at the Methodology item of this research, the monthly return of three indexes were selected for the period between 2002 and 2016: i) the IBOV, which is suppose to gauge the average performance of the Brazilian stock market; ii) the IMOB, representing the direct Real Estate investment performance from Brazilian market; and iii) the IFIX, characterizing the indirect Real Estate investment performance from Brazilian market;.

To represent a risk free asset it was chosen the Poupança rate from Brazilian market.

With this set of data it is possible to apply the proposed methodology to find how important are diversification and control in terms of market performance.

Methodology

To verify the hypothesis empirically, I use a portfolio approach to understand how FIIs with diversification and full control strategies performed in the past years at the Brazilian market.

This analysis consists of a comparison of the Betas and Jensen's Alpha between four

categories of portfolios, one composed only by FIIs with diversification strategy, other only by FIIs with focused strategy, a third by FIIs with full control over its properties and the last one by FIIs without full control of its properties. Betas and Alphas are obtained according to CAPM methodology described hereunder.

These results should provide an initial understanding of the diversification and full control strategies behind FIIs, they are discussed at the Results section at page 19.

After a primary overview of the portfolio analysis, the methodology will consist of a regression model where the dependent variable (Y) is the Jensen's Alpha using the market index (CAPM) while the independent / explanatory variables (X) are the Age, Fund Net Asset Value and Market Capitalization of the FIIs as well as two dummies (binomial variables) representing if the FII is diversified and if there is 100% control of the buildings within its portfolio. The equation for this model is represented by equation (1).

$$(1) \text{Alpha}_{i,t} = \beta_0 + \beta_1 \ln(\text{Age})_{i,t} + \beta_2 \ln(\text{NAV})_{i,t} + \beta_3 \ln(\text{MCap})_{i,t} + \delta_1(\text{D}_{\text{DIV}})_i + \delta_2(\text{D}_{\text{CONTROL}})_i + \delta_3(\text{D}_T)_t + \varepsilon_{i,t}$$

The Jensen's alpha, represented by $\text{Alpha}_{i,t}$ at equation (1), and which is calculate over a rolling window approach as explained ahead, is a variable that is used to understand the historical performance of an asset, stock or portfolio (Berk and Demarzo, 2014). Its interpretation is basically: i) if Jensen's alpha is above zero then the asset did better than expected during the regression period; ii) if Jensen's alpha is equal to zero then the asset did as well as expected; and iii) if Jensen's alpha is bellow zero then the asset did worse.

The variables Age, Fund Net Asset Value and Market Capitalization are control variables that characterize each FII. When valuating properties, usually one concern is the age of the building, for example the hedonic methodology uses the age of properties as a quality

variable, among other factors, to construct housing price indexes (Case et al. 1991). Because it is a value that can represent time experience and can be understood as a quality variable for FIIs, it is interesting to associate Age to the FII's performance.

As Barkham and Ward (1999) observed, the value of the property company shares is associated with the performance of the Real Estate market. The Fund Net Asset value collected from Bloomberg database is an outcome per share, this way it is a good alternative to use as the value of the property company to correlate to performance.

By analyzing how diversification and control affects the Jensen's alpha, it is possible to understand how relevant they are for FII's management strategy.

To apply the regression proposed at equation (1), first it is necessary to determine the Jensen's alpha of each FII. The method to obtain this variable is a regression analysis according to the CAPM model. The equation (2) for this regression is shown below:

$$(2) \quad R_{i,t} - R_{f,t} = a_i + b_i(R_{m,t} - R_{f,t}) + \varepsilon_{i,t}$$

The excess return of FII's stock in relation to the risk free rate ($R_{i,t} - R_{f,t}$) is the dependent variable (Y) while the independent variable (X) is the excess return of the market in relation to the risk free rate ($R_{m,t} - R_{f,t}$). From this model, for each FII, "a" is the intercept, in other words the Jensen's Alpha, and "b" is the Beta.

The FII's returns, $R_{i,t}$, comes from the difference in percentages between the FII's total gross return from period t and period t-1 ($\text{grossret}_{(t)} / \text{grossret}_{(t-1)} - 1$).

As mentioned in the Data Item from this research, the Poupança represents the risk free asset and there are three indicators that can illustrate market returns, the IBOV, the IMOB and the IFIX. As explained before, they can benchmark the FIIs and to have a more complete analysis, the Betas and Jensen's Alphas are obtained for each of them.

Also, since the data from Brazilian FIIs doesn't have the same historical amount as the US-REITs data, and to take full advantage of it, the regression contemplates a period of 24 months and is applied to obtain a historical set of Alphas and Betas from each FII using a rolling window method. The final result is a panel data sample where for the 110 FIIs there will be "x" number of Alphas and Betas registered for as much months as possible the data allows. Since some FIIs are older than others, it is expected an unbalanced panel data set. This criteria, although might present some biases, it is adopted to maintain a relevant statistical sample for the regression model.

In addition, to determine how each FII is classified according to diversification degree and property control, their composition is checked. The dummy variable for diversification is obtained by analyzing which types of properties composes the FII. If it is identified the existence of more than one type, from Commercial, Logistics / Industrial, Residential, Retail and Hotel, then the FII is considered diversified and the attributed value for the dummy variable is 1. On the other hand, if the FII is composed by only one type of property, meaning that it is a specialized FII, the attributed value is 0.

The dummy variable for control is classified by reviewing if the building(s) that are part of the FII's portfolio is 100% controlled by FII's managers. This way, the value for this dummy is 1 if there is 100% control and 0 if there is not.

Results

First the results regarding the classification of FIIs according to diversification and control are presented and discussed. Thereafter it features an analysis about the values that encompass the Jensen's Alpha and Betas for the three different benchmarks, the IBOV, IMOB and IFIX. Finally it is displayed the results of the regression to explain the importance of the diversification and control within the FIIs.

The review of documents about each FII allowed its classification and out of 110 funds, 43 are diversified and 38 have 100% control of their buildings. Since approximately 60% of the analyzed FII aren't diversified, this first numbers suggests that in Brazil there is a preference to seek specialization strategy. This penchant could be because focused strategy allows less cost in monitoring and analyzing markets, as well as having managers with better understanding and knowledge of a specific sector. (Chong et al, 2012).

As for the level of control, only 35% of the analyzed FIIs own 100% of the properties that composes its portfolio. In addition, 85% of those FIIs are specialized in one type of property. One might conclude that although 100% control could be desired, it is not the predominant strategy, and if it is adopted, probably follows up a specialization scheme. Refer to Table 5 that present the numbers that lead to the percentages showed before.

Table 5. Strategies: Diversified Vs. Specific | 100% control or not

Strategy Adopted	
Diversified	43
100% Control	38
100% control and Specific	33
TOTAL Number of FIIs	110

Next it is discussed the outcomes provided by the appliance of the CAPM model benchmarked with each of the three different index, IBOV, IMOB and IFIX.

Jensen's Alphas Benchmarked with IBOV, IMOB and IFIX

The Jensen's Alphas were obtained by applying the CAPM model for a time period of 24 months, and executing a rolling window approach to create a historical sample of alphas for each FII. Since some FIIs aren't old enough to provide a CAPM regression of 24 months, the number of FIIs for the following results decreased from 110 to 99 funds. Refer to Tables 6 where the average annualized Jensen's Alphas are presented.

Table 6. Summary from CAPM results

	Benchmarked with IBOV (Overall Brazilian Stock Market)		Benchmarked with IMOB (Direct Real Estate Market)		Benchmarked with IFIX (Indirect Real Estate Market)	
Variable	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Ri	0,04995	0,22031	0,03708	0,21559	-0,03648	0,21087
FII Excess Return	-0,02040	0,22045	-0,03315	0,21575	-0,10797	0,21089
Market Excess Return	-0,13131	0,19979	-0,16457	0,23047	-0,10767	0,02725
Beta	0,13219	0,44001	0,10134	0,37678	0,56793	1,82071
Alpha	0,06664	0,10263	0,05931	0,11236	0,04996	0,16440
Age	62,50674	31,57021	63,40451	32,20965	63,48746	33,73052
Time Period	July 2006 to February 2016		February 2010 to February 2016		February 2013 to February 2016	
Total Observations	3783		3545		2632	
Number of FIIs	99		99		99	

The first index, IBOV, represents the broad market at the stock exchange and contemplates a time period analysis between July 2006 and February 2016, while IMOB and IFIX get more specific, where IMOB is an index for the direct Real Estate Brazilian market and IFIX an index representing FIIs. The benchmark considering the IMOB index contemplates a time period analysis between February 2010 and February 2016, and the IFIX index contemplates an analysis between February 2013 and February 2016. It could be expected that, because from IBOV to IFIX indexes the benchmark gets more accurate to the specific indirect Real Estate Market, the alphas would get closer to 0 meaning a similar performance. What Table 6 shows is exactly that, the average alpha benchmarked with IBOV is 6.6% annualized, with IMOB is 5.9% and with IFIX is 4.9%.

If a group division is created to simulate portfolios of FII's strategy types where diversified FIIs are apart from the others with specification strategy and FIIs with full control get separated from the ones without, results lead to an interpretation of strategy performance. Tables 7, 8 and 9 summarize the statistical results for the average Jensen's Alpha according to portfolio division and each type of index used at the CAPM regression.

Table 7. Portfolios Analysis – Typo Benchmark IBOV index

Benchmanrked with IBOV index (Over all Brazilian Stock Market)				
Variable	FII with Diversification Strategy		FII with Specification Strategy	
	Mean	Std. Dev.	Mean	Std. Dev.
Ri	0,05532	0,23051	0,04751	0,21556
FII Excess Return	-0,01562	0,23064	-0,02258	0,21569
Market Excess Return	-0,13236	0,20050	-0,13083	0,19951
Beta	0,17065	0,21841	0,11469	0,50898
Alpha	0,03390	0,04780	0,08153	0,11929
Age	58,59510	30,34025	64,28654	31,96185
Total Observations =	1183		2600	
Number of FIIs =	36		63	

Variable	FII with 100% control		FII without 100% control	
	Mean	Std. Dev.	Mean	Std. Dev.
Ri	0,05231	0,20335	0,04815	0,23254
FII Excess Return	-0,01751	0,20351	-0,02262	0,23266
Market Excess Return	-0,12545	0,19834	-0,13580	0,20093
Beta	0,143163	0,223390	0,123767	0,551225
Alpha	0,05659	0,05028	0,07435	0,12912
Age	68,418140	34,274200	57,968220	28,513520
Total Observations =	1643		2140	
Number of FIIs =	38		61	

Table 8. Portfolios Analysis – Typo Benchmark IMOB index

Benchmanrked with IMOB index (Direct Real Estate Market)				
Variable	FII with Diversification Strategy		FII with Specification Strategy	
	Mean	Std. Dev.	Mean	Std. Dev.
Ri	0,03992	0,22643	0,03581	0,21060
FII Excess Return	-0,03093	0,22657	-0,03415	0,21076
Market Excess Return	-0,16568	0,23107	-0,16407	0,23024
Beta	0,12881	0,19884	0,08904	0,43290
Alpha	0,03896	0,04558	0,06844	0,13165
Age	59,86873	30,97357	64,98897	32,63050
Total Observations =	1097		2448	
Number of FIIs =	36		63	

Variable	FII with 100% control		FII without 100% control	
	Mean	Std. Dev.	Mean	Std. Dev.
Ri	0,03907	0,20591	0,03556	0,22276
FII Excess Return	-0,03057	0,20610	-0,03513	0,22289
Market Excess Return	-0,15742	0,22909	-0,17003	0,23156
Beta	0,12240	0,22818	0,08525	0,45843
Alpha	0,05514	0,05010	0,06250	0,14270
Age	70,12305	34,65451	58,26779	29,19049
Total Observations =	1536		2009	
Number of FIIs =	38		61	

Table 9. Portfolios Analysis – Typo Benchmark IFIX index

Benchmanrked with IFIX index (Indirect Real Estate Market)				
Variable	FII with Diversification Strategy		FII with Specification Strategy	
	Mean	Std. Dev.	Mean	Std. Dev.
Ri	-0,031759	0,212022	-0,038741	0,210369
FII Excess Return	-0,103889	0,212030	-0,109925	0,210405
Market Excess Return	-0,106447	0,095241	-0,108259	0,094007
Beta	0,62784	0,67481	0,53925	2,16385
Alpha	0,005516	0,034950	0,071231	0,198168
Age	58,95892	32,06236	65,65506	34,29820
Total Observations =	852		1780	
Number of FIIs =	36		63	

Variable	FII with 100% control		FII without 100% control	
	Mean	Std. Dev.	Mean	Std. Dev.
Ri	-0,059819	0,193097	-0,020165	0,222390
FII Excess Return	-0,130790	0,193152	-0,092016	0,222405
Market Excess Return	-0,110461	0,094404	-0,105722	0,094408
Beta	0,75214	0,51516	0,43913	2,32559
Alpha	0,008418	0,039310	0,079002	0,211389
Age	71,04894	36,87385	58,20077	30,25544
Total Observations =	1083		1549	
Number of FIIs =	38		61	

Taking in consideration the average alpha for all the 99 FIIs and comparing it to the alphas sorted by strategy criteria, results show that in all scenarios, with IBOV, IMOB and IFIX indexes, specification strategy and not having full control of the property return average Jensen's Alphas above the average for all sample of the 99 FIIs and for the three indexes scenarios. Also, if the portfolios are compared inside each scenario, the average Jensen's Alpha is higher for portfolios of FIIs with specification strategy and without 100% control of properties. The opposite behavior happens with diversification and full control groups. This is one preliminary result suggesting that to have a focused FII in Brazil could be better than a diversified one. It is also a preliminary result that shows that having 100% control of the properties is not a strategy that overcomes lack of full control.

However, it is not possible yet to affirm that diversification and 100% control strategies have a negative effect over performance. Next the outcome from the regression model presents information for a more accurate conclusion.

Regression Results

The regression methodology had three approaches that were determined according to the origin of the Jensen's Alpha value. As it was described previously, the Jensen's Alpha was calculated according to three different benchmarks, the IBOV index, the IMOB index and the IFIX index. Therefore, Table 10 presents three sets of results for the regression model proposed at this paper.

Table 10. Regression Outcomes

$$\text{MODEL: } \text{Alpha}_{i,t} = \beta_0 + \beta_1 \ln(\text{Age})_{i,t} + \beta_2 \ln(\text{NAV})_{i,t} + \beta_3 \ln(\text{MCap})_{i,t} + \delta_1(\text{D}_{\text{DIV}})_i + \delta_2(\text{D}_{\text{CONTROL}})_i + \delta_3(\text{D}_T)_t + \varepsilon_{i,t}$$

	IBOV Index (Stock Exchange)	IMOB Index (Direct Real Estate Market)	IFIX Index (Indirect Real Estate Market)
Innav	-0.002*** (-6.36)	-0.001** (-2.44)	-0.003*** (-5.35)
Inmcap	0.003*** (8.03)	0.003*** (5.77)	0.004*** (4.90)
Inage	0.004*** (3.60)	0.006*** (5.15)	0.005*** (2.73)
ddiv	-0.003** (-2.50)	-0.001 (-0.81)	-0.006*** (-2.71)
dcontrol	-0.002** (-1.99)	-0.002** (-2.08)	-0.006*** (-2.90)
Observations	3,783	3,545	2,632
R-squared	0.130	0.108	0.049

t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Notes: Regression results of the Jensen's Alpha (Alpha) on measures of Age, Fund Net Asset Value (NAV), Market Capitalization (Mcap), Diversification Strategy (D_{DIV}) and Level of Control (D_{CONTROL}). The variable D_{DIV} takes a value of 1 if is diversified strategy and a value of 0 if is focused strategy. Likewise the D_{CONTROL} has a value of 1 if there is full control of the FII's property and 0 if there is not.

The Dummies for date represented by (D_T)_t had its results omitted because these variables were only inserted as a mechanism to cluster the regression according to date observations.

The information shown in Table 11 suggests the conclusion that diversification strategy has a negative effect at the Jensen's Alpha value, in other words, it prejudice performance. The constant δ_1 associated to the diversification strategy at the regression model has a negative value for the three scenarios. Its value is -0.003, -0.001 and -0.006 for IBOV index, IMOB index and IFIX index, respectively. This result is also sustained by relevant statistics, since the p-value shows more than 95% of thrust for the IBOV and IFIX cases.

Those results indicate that in the Brazilian Real Estate market a FII that specializes in one type of property should perform better than diversified FIIs. Although differently from Anderson et al. (2015), who found positive implications of diversification, the results from the present analysis are in accordance to the vantages that Chong et al. (2012) comment about specification strategy, which are better understanding and knowledge of specialist markets and sectors, and less cost in monitoring and analyzing more markets. In the Brazilian case maybe those factor have a great amount of impact at the performance of FIIs at a point that it overcomes vantages from diversification.

When analyzing results from the impact of property control over performance, numbers suggests an unexpected outcome. The hypothesis that full control over the buildings that integrate the FII's portfolio positively impacts its performance isn't sustained. The constant δ_2 , which is associated to the control strategy, has values of -0.002, -0.002 and -0.006 for the IBOV, IMOB and IFIX indexes, respectively. Consequently and with statistical importance, results actually show a negative impact at performance when FIIs have full control over its buildings for the three scenarios analyzed.

The good expectation about full control positively impacting FII's performance was because it wouldn't exist problems originated from agency costs and conflicts between FII's managers and third parts. However, in the Brazilian case, sharing a building ownership with other landlords could actually motivate a competitive behavior that would make FII's managers

operate more efficiently and with more level of professionalism, which would make the FII obtain better results.

Although the regression model didn't sustain both the hypothesis proposed in this paper, an important consideration to make is that the model also didn't present a high R-squared value. For the three scenarios exposed the R-squared is below 0.15, which indicates that the dependent variable, the Jensen's Alpha, has less than 15% of its value explained by the proposed model where the explanatory variables are the Age, Fund Net Asset Value, Market Capitalization and the dummies for diversification strategy and full control of properties. This valuation might suggest a review of the methodology in order to make it more accurate. Nevertheless, the overall analysis explores more about the FII's market in Brazil providing the literature with more information and also motivating more research around the topic.

Conclusion

In this paper it is examined the impact of diversification strategy and full control of properties at the FII's performance. Differently from Anderson et al. (2015), the research actually suggests that in Brazil the FIIs that adopt diversification strategy should expect a negative impact over its performance. Also, the analysis of the level of control that FIIs have over its properties is a new topic when correlated to FII's performance and has very little literature covering it. The results obtained through the methodology adopted in this paper show a negative impact of full control strategy over the performance, suggesting that it is more beneficial to have other partners sharing building administration decisions. The overall research also suggest that the study of diversification and control / ownership strategies from FIIs deserves more accurate model / methodology to provide better outcomes.

Finally, this research approaches the indirect Real Estate Brazilian market and provides intriguing results. Because the classification of diversification and control were simplified to

dummies returning extreme values limiter to 1 or 0, in the future this analysis can be improved by better comprehending the diversification status of each FII and also the property ownership. A suggestion would be approaching it through the Herfindahl–Hirschman Index. Another extension could be qualitative studies about FIIs since management mechanisms can be very sensible and differ from case to case.

References

- Anderson, Randy I., Justin D. Benefield, Mathew E. Hurst.** 2015. "Property-type diversification and REIT performance: an analysis of operating performance and abnormal returns". *J Econ Financ*, 1–27.
- Bairagi, Ranajit K., William Dimovski.** 2011. "The underpricing of US REIT IPOs: 1996–2010". *Journal of Property Research*, 28:233–248.
- Barkham, Richard J., Charles W. R. Ward.** 1999. "Investor Sentiment and Noise Traders: Discount to Net Asset Value in Listed Property Companies in the U.K.". *Journal of real Estate Research*, 18: 291–312.
- Basu, Nilanjan, Imants Paeglis, Mohammad Rahnamaei.** 2016. "Multiple blockholder, power, and firm value". *Journal of Banking and Finance*, 66: 66 - 78.
- Berger, Philip G., Eli Ofek.** 1995. "Diversification's effect on firm value". *Journal of Financial Economics*, 37:39–65.
- Berk, Jonathan, and Peter Demarzo.** 2014. *Corporate Finance*. Boston, MA. Pearson Education Inc.
- Boer, Dick, Dirk Brounen, Hans Op'T Veld.** 2005. "Corporate focus and stock performance international evidence from listed property markets: International evidence from listed property markets". *The Journal of Real Estate Finance and Economics*, 31:263–281.
- Boukouras, Aristotelis.** 2011. "Separation of Ownership and Control: Delegation as a Commitment Device". *Georg-August University Gottingen*.
- Brockman, Paul, Dan W. French, Chris Tamm.** 2014. "REIT Organizational Structure, Institutional Ownership, and Stock Performance". *Journal of Real Estate Portfolio Management*, 20:21–36.

Brounen, Dirk, Sjoerd de Koning. 2012. "50 YEARS OF REAL ESTATE INVESTMENT TRUSTS:AN INTERNATIONAL EXAMINATION OF THE RISE AND PERFORMANCE OF REITS". *Journal of Real Estate Literature*, 20:197 – 223.

Byrne, Peter, Stephen Lee. 2003. "An exploration of the relationship between size, diversification and risk in UK real estate portfolios: 1989-1999". *Journal of Property Research*, 20:191.

Campbell, Robert D., Chinmoy Ghosh, Milena Petrova, C. F. Sirmans. 2011. "Corporate Governance and Performance in the Market for Corporate Control: The Case of REITs". *J Real Estate Financ Econ*, 42:451–480.

Capozza, Dennis R., Sohan Lee. 1995. "Property Type, Size and REIT Value". *Journal of Real Estate Research*, 10:363.

Case, Bradford, Henry O. Pollakowski, Susan M. Wachter. 1991. "On Choosing Among House Price Index Methodologies". *AREUEA Journal*, 19:286–307.

Chan, Su Han, Jiajin Chen, Ko Wang. 2013. "Are REIT IPOs Unique? The Global Evidence". *J Real Estate Financ Econ*, 47:719–759.

Chong, James, Alexandra Krystalogianni, Simon Stevenson. .2012. "Dynamic correlations between REIT sub-sectors and the implications for diversification". *Applied Financial Economics*, 22:1089–1109.

Cosentino, Rafael M. S. Anna, Claudio T. Alencar. 2011. "Fundos de Investimento Imobiliário: Análise do desempenho e comparação com US-REITs, UK-REITs, G-REITs e SIIC". *Latin American Real Estate Society*, 11^a Conferência Internacional.

CVM. 2016. Comissão de Valores Mobiliários. www.cvm.gov.br (accessed May 6, 2016).

Devos, Erik, Seow-Eng Ong, Andrew C. Spieler, Desmond Tsang. 2013. "REIT Institutional Ownership Dynamics and the Financial Crisis". *J Real Estate Financ Econ*, 47:266–288.

- Dolde, Walter, John D. Knopf.** 2010. "Insider Ownership, Risk, and Leverage in REITs". *J Real Estate Financ Econ*, 41:412–432.
- Erol, Isil, Dogan Tirtiroglu.** 2011. "Concentrated Ownership, No Dividend Payout Requirement and Capital Structure of REITs: Evidence from Turkey". *J Real Estate Financ Econ*, 43:174–204.
- EPRA.** 2016. European Public Real Estate Association. www.epra.com (accessed May 6, 2016).
- Fonseca, José B. Petry.** 2012 "LINHAS GERAIS SOBRE OS FUNDOS DE INVESTIMENTO IMOBILIÁRIO". *Santos Silveiro Advogados*.
- Furrer, Oliver.** 2011. *Corporate Level Strategy – Theory and Applications*. London and New York. Routledge Taylor & Francis Group.
- Gabriel, Fernanda Souza.** 2014. "Fundos de Investimento Imobiliário versus Real Estate Investment Trusts: Análise de Performance". Masters Diss. Uni. Federal de Uberlândia.
- Ghosh, Chinmoy, Le Sun.** 2014. "Agency Cost, Dividend Policy and Growth: The Special Case of REITs". *J Real Estate Financ Econ*, 48:660–708.
- Guimarães, José G. Macedo.** 2013. "PERSISTÊNCIA NA PERFORMANCE DE FUNDOS DE INVESTIMENTO IMOBILIÁRIO BRASILEIROS ENTRE 2008 E 2012". Masters Diss. Fundação Getúlio Vargas.
- Howton, Shawn D., Shelly W. Howton, Johnny Lee, Mi Luo.** 2012. "REIT Ownership and Property Performance: Evidence from the Lodging Industry". *Journal of Real Estate Portfolio Management*, 18:169–185.
- Karvel, George, and Maurice A. Unger.** 1991. *Real Estate Principle and Practices*. South-Western Publishing Co.
- Lang, Larry H. P., Rene M. Stulz.** 1994. "Tobin's q, Corporate Diversification, and Firm Performance". *The Journal of Political Economy*, 102:1248–1280.

- Lazano, M. Belén, Beatriz Martínez, Julio Pindado.** 2015. "Corporate governance, ownership and firm value: Drivers of ownership as a good corporate governance mechanism". *International Business Review*.
- NAREIT.** 2016. National Association of Real Estate Investment Trusts. www.reit.com (accessed May 6, 2016).
- Pagliari, Joseph L., Kevin A. Scherer, Richard T. Monopoli.** 2005. "Public versus Private Real Estate Equities : A More Refined, Long-Term Comparison". *Real Estate Economics*, 33:147–187.
- Ro, SeungHan, Alan J. Ziobrowski.** 2011. "Does Focus Really Matter? Specialized vs. Diversified REITs". *J Real Estate Financ Econ*, 42:68–83.
- Wooldridge, Jeffrey M.** 2002. *Econometric Analysis of Cross Section and Panel Data*. Cambridge, MA: The MIT Press.
- Wooldridge, Jeffrey M.** 2014. *Introduction to Econometrics*. Europe, Middle East and Africa Edition: Cengage Learning.

Appendices

Appendix A: System types according to country: FIIs and REITs

Table 02. Main characteristic of FIIs and REITs

General Information		
Country:	Brazil	United States
Nomenclature:	Fundo de Investimento Imobiliário	Real Estate Investment Trust
Acronym:	FII-BR	US-REIT
Enacted Year:	1993	1960
Citation (Legislation e Regulations)	Federal Law 8.668/93, amended by Federal Law 9.779/99, and regulated by Rulings (ICVM) 206/94 and 472/08	"Internal Revenue Code"
REIT type:	Fund Type	Corporate Type
Requirements		
Key Requirements	- Must be approved by the Brazilian Securities Commission (CVM) - Managed by a financial institution - Subscriptions for units must be registered with the CVM	Entities must file Form 1120-REIT with the Internal Revenue Service.
Legal Form	Fund (Contractual agreement between investors and fund manager)	Any legal US entity taxable as a domestic corporation.
Minimum Initial/Share Capital	No	No
Unit holder / Shareholder Requirements	- Construction company, or any of the other parts, may not hold more than 25% interest in an FII - At least 50 investors and none can hold more than 10% of shares from the FII individually	- At least 100 shareholders. - Five or fewer individuals or foundations may not hold more than 50% of the shares. - No restriction on foreign shareholders.
Listing Mandatory	No	No
Restrictions on activities / investments	The minimum real estate investment was previously set at 75% of an FII's total assets, although this requirement has been revoked by ICVM 472/08 effective from December 03, 2008. New regulations set out a list of authorised investments	- At least 75% of its assets must be real estate, government securities or cash - 75% asset test and 75% and 95% income tests. - Cannot own more than 10% of another corporation's stock, other than in another REIT or a taxable REIT subsidiary (ownership of a 100% owned 'qualified REIT' subsidiary is ignored). - No more than 5% of the value of its assets can be represented by securities of any one issuer, other than another REIT or a taxable REIT subsidiary (ownership of a 100% owned 'qualified REIT' subsidiary is ignored). - Cannot own more than 25% of its assets in securities of one or more taxable REIT subsidiaries.
Leverage	No leverage restrictions applicable	No legal restrictions
Profit distribution obligations		
Operative income	At least 95% of income arising on a cash basis	At least 90% of its taxable ordinary income.
Capital gains	At least 95% of capital gains arising on a cash basis	Not required to distribute.
Timing	Every six months	Annually.
Sanctions		
Penalties / loss of status rules	Loss of tax exemption	- Various penalties. - Possible loss of REIT status.
Tax treatment at the level of REIT		
Current income	- Income from real estate activities is tax-exempt - Income from other activities is subject to withholding Income tax	Tax-exempt to extent distributed.
Capital gains	Capital gains are treated as income from real estate activities and therefore tax-exempt	Tax-exempt to extent distributed.
Withholding tax	Withholding tax suffered by the FII may be set against tax on distribution to investors	- no refund of foreign withholding tax. - It can use a foreign tax as deduction.
Conversion into REIT status	N/A	- 'Built-in gains' are taxable. - Exemption is possible if assets held for ten years.
Registration duties	Municipal real estate transfer tax (ITBI) applicable.	Transfer tax.
Tax treatment at the unit holder's level		
Domestic unit holder / shareholder		
Corporate unit holder / shareholder	- Withholding income tax at 20% on distributions from the FII or capital gains on the disposals of units in the FII.	Income, capital gains, and return of capital distributions are taxed at a rate of 35%.
Individual unit holder / shareholder	- Withholding income tax at 20% on distributions from the FII or capital gains on the disposals of units in the FII. Income may be exempt from withholding tax if special conditions are met.	- Capital gain dividends are taxed at the maximum 23.8% rate. - Return of capital is tax-deferred.
Withholding tax	- Corporate unit holders may credit for withholding tax applied by the FII on distributions.	N/A
Foreign unit holder / shareholder		
Corporate unit holder / shareholder	- Withholding tax at 20% as a general rule. - Withholding tax at 15% on income, providing some conditions are met. - Capital gains at 0%, providing some conditions are met.	- 30% on income dividends. - 35% on capital gain dividends. - 10% on return of capital.
Individual unit holder / shareholder	- Withholding tax at 20% as a general rule. - Withholding tax at 15% on income, providing some conditions are met. - Capital gains at 0%, providing some conditions are met.	- 30% on income dividends. - 35% on capital gain dividends. - 10% on return of capital.
Withholding tax	Questionable whether tax treaty relief available.	Tax treaty relief available.
Tax treatment of foreign REIT and its domestic unit holders / shareholder		
Foreign REIT	Taxed with 15% withholding tax on income and capital gains.	Generally 30% withholding tax.
Corporate unit holder / shareholder	Income and capital gains arising to a corporate unit holder taxed at 34% (40%-45% if the beneficiary is a financial institution, insurance or related company).	- Dividend distributions are taxed at a rate of 35%. - Return of capital is tax-deferred.
Individual unit holder / shareholder	Income and capital gains arising to an individual unit holder taxed at rates from 7.5% to 27.5%.	- Dividends are generally taxed at a maximum 23.8% rate if foreign REIT is not a 'PFIC'. - Return of capital is tax-deferred.

Source: EPRA – Global REIT Survey 2015